

What is claimed:

1. A method for inducing hemostasis in a subject, comprising administering to said subject an inducer of P-selectin activity, such that hemostasis occurs.  
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2. The method of claim 1, wherein the inducer of P-selectin activity increases the level of soluble P-selectin polypeptide in the plasma of the subject.
3. The method of claim 2, wherein the inducer of P-selectin activity  
10 increases the proteolytic cleavage of P-selectin from a cell surface.
4. The method of claim 2, wherein the inducer of P-selectin activity increases P-selectin gene expression.
- 15 5. The method of claim 1, wherein the inducer of P-selectin activity binds to a P-selectin receptor or ligand and mimics the activity of a P-selectin polypeptide.
6. The method of claim 5, wherein the inducer of P-selectin activity is an antibody to a P-selectin receptor or ligand.  
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7. The method of claim 5, wherein the P-selectin ligand is PSGL-1.
8. The method of claim 6, wherein the antibody is an antibody to PSGL-1.
- 25 9. A method for inducing hemostasis in a subject, comprising administering to said subject a soluble P-selectin polypeptide, such that hemostasis occurs.
10. A method for inducing hemostasis in a subject, comprising administering to said subject an isolated nucleic acid molecule comprising a nucleotide sequence  
30 which encodes a soluble P-selectin polypeptide, such that hemostasis occurs.

11. A method for inducing hemostasis in a subject, comprising administering to said subject a recombinant cell expressing soluble P-selectin polypeptide, such that hemostasis occurs.

5 12. A method for treating or preventing a disorder associated with hypocoagulation in a subject, comprising administering to said subject an inducer of P-selectin activity, such that the disorder associated with hypocoagulation is treated or prevented.

10 13. The method of claim 12, wherein said disorder is a hemorrhagic disorder.

14. The method of claim 12, wherein said disorder is hemophilia.

15 15. The method of claim 12, wherein the inducer of P-selectin activity increases the level of soluble P-selectin polypeptide in the plasma of the subject.

16. A method for treating or preventing a disorder associated with hypocoagulation in a subject, comprising administering to said subject a soluble P-selectin polypeptide.

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17. A method for treating a vasculature-associated disease in a subject, comprising administering to said subject an inducer of P-selectin activity, such that the vasculature-associated disease is treated.

25 18. The method of claim 17, wherein said vasculature-associated disease is a tumor.

19. The method of claim 18, wherein said subject is further treated with a molecule effective to induce a procoagulant state in tumor associated vasculature.

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20. The method of claim 19, wherein said molecule comprises a first binding region that binds to a component of a tumor cell or tumor associated vasculature, operatively linked to a coagulation factor or a second binding region that binds to a coagulation factor.

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21. The method of claim 20, wherein said first binding region comprises an antibody, or an antigen binding fragment thereof, that binds to VCAM-1, operatively linked to tissue factor.

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22. The method of claim 17, wherein the inducer of P-selectin activity increases the level of soluble P-selectin polypeptide in the plasma of the subject.

23. A method for treating a vasculature-associated disease in a subject, comprising administering to said subject a soluble P-selectin polypeptide.

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24. A method for reducing hemostasis in a subject, comprising administering to said subject an inhibitor of P-selectin activity, such that procoagulant activity is reduced.

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25. The method of claim 24, wherein the inhibitor of P-selectin activity decreases the level of soluble P-selectin polypeptide in the plasma of the subject.

26. The method of claim 25, wherein the inhibitor of P-selectin activity decreases the proteolytic cleavage of P-selectin from the cell surface.

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27. The method of claim 26, wherein the inhibitor of P-selectin activity decreases P-selectin gene expression.

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28. The method of claim 24, wherein the inhibitor of P-selectin activity is an anti-P-selectin antibody.

29. The method of claim 24, wherein the inhibitor of P-selectin activity is recombinant soluble PSGL-1.

30. A method for reducing hemostasis in a subject, comprising administering to said subject an isolated nucleic acid molecule comprising a nucleotide sequence which is antisense to a nucleotide sequence which encodes a P-selectin polypeptide,  
5 such that hemostasis is reduced.

31. A method for treating or preventing a thrombotic disorder in a subject, comprising administering to said subject an inhibitor of P-selectin activity, such that the thrombotic disorder is treated or prevented.

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32. The method of claim 31, wherein said disorder is arteriosclerosis.

33. The method of claim 31, wherein said disorder is deep vein thrombosis.

15 34. The method of claim 31, wherein said disorder is angina.

35. The method of claim 31, wherein said thrombotic disorder is restenosis following medical intervention.

20 36. The method of claim 31, wherein the inhibitor of P-selectin activity decreases the level of soluble P-selectin polypeptide in the plasma of the subject.

37. A method for modulating hemostatic potential in a subject, comprising modulating P-selectin activity in said subject.

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38. The method of claim 37, wherein said modulating step comprises administering to the subject a modulator of P-selectin activity.

39. The method of claim 38, wherein the modulator regulates the level of  
30 soluble P-selectin in the plasma of said subject.

40. The method of claim 38, wherein the modulator is an inhibitor of P-selectin activity.

41. The method of claim 38, wherein the modulator is an inducer of P-selectin activity.

5           42. A method for diagnosing a procoagulant state in a subject, comprising determining a P-selectin activity in a biological sample of the subject, wherein an increased P-selectin activity in the sample indicates a procoagulant state in the subject.

          43. The method of claim 42, which comprises providing a test sample of  
10 blood from a subject and comparing the level of soluble P-selectin in the test sample to the level of soluble P-selectin in a control blood sample from a subject with normal hemostatic activity, wherein an increased level of soluble P-selectin in the test sample as compared to the control sample is an indication of a procoagulant state in the subject.

15           44. A method of identifying a subject having a thrombotic disorder, or at risk for developing a thrombotic disorder, comprising determining a P-selectin activity in a biological sample of the subject, wherein an increased P-selectin activity in the sample identifies a subject having a thrombotic disorder, or at risk for developing a thrombotic disorder.

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          45. The method of claim 44 comprising:

          a) contacting a sample of blood obtained from said subject with a P-selectin binding substance; and

          b) detecting the presence of increased levels of soluble P-selectin in said  
25 sample, thereby identifying a subject having a thrombotic disorder, or at risk for developing a thrombotic disorder.

          46. A method for identifying a compound capable of modulating hemostasis, comprising assaying the ability of the compound to modulate a P-selectin activity,  
30 thereby identifying a compound capable of modulating hemostasis.

          47. The method of claim 46, wherein the P-selectin activity is the expression of soluble P-selectin.

48. A pharmaceutical composition for modulating hemostasis comprising a compound identified according to the method of claim 46.

5           49. A pharmaceutical composition for modulating hemostasis containing at least one compound which is a modulator of P-selectin activity.